

Indications of Ultrasound

Dr. Aastha Mishra

Indications:-

*** Soft tissue injury :-**

Ultrasound is often used after soft tissue injuries as the mechanical effects help to remove the traumatic exudates and reduces the danger of adhesion formation. Heat produced by ultrasound in large diameter nerve fibers may reduce pain through gate mechanism. Accelerated protein synthesis stimulates the rate of repair of damaged tissues.

*** Scar tissue:-**

Scar tissue is made pliable (capable of bend or twist) by the application of ultrasound, which allows more

effective stretching of contracted scars. If the scar is bound down on underlined structures ultrasound may help in gaining its release.

*** Chronic indurated edema:**

The mechanical effects of ultrasound have an effect on chronic edema and helps in its treatment. It also breaks down adhesions formed between adjacent structures.

*** Varicose ulcers:-**Ultrasound is found effective to promote the healing of varicose ulcers and pressure sores.

Bone injuries:-

Ultrasound in the first and second week after bony injury can increase bone union, but given to an unstable fracture during the phase of cartilage proliferation, it may result in proliferation of cartilage and therefore decrease in bone reunion.

Plantar warts:-

Plantar warts are occasionally seen in the athletic population, occurring on the weight bearing areas of the feet and caused by either a virus or microtrauma. These lesions contain thrombosed capillaries in a

whitish colored soft core covered by hyperkeratotic epithelial tissue. Among other more conventional techniques, several studies have recommended ultrasound as an effective painless method for eliminating plantar warts.

Placebo effect:-

While the physiological effects of ultrasound have been discussed in detail, it can also have significant therapeutic psychological effects. A number of studies have demonstrated a placebo effect in patients receiving ultrasound.